SWEETWATER COVE LAKE

JUNE BIOASSESSMENT REPORTS

Greetings Sweetwater Residents,

Please find the latest bioassessment report for your lake below. Next inspection is scheduled for **July 8th, 2015** (weather permitting). Key highlights of this update include:

- Lyngbya status
- Water Quality observations
- Submersed aquatic vegetation (SAV)
- Native emergent vegetation observations
- Exotic emergent vegetation observations
- Recommendations for you and your waterbody

Bioassessment

Weekly throughout June, Seminole County Lake Management Program biologists (Thomas Calhoun, Joey Cordell, and Gloria Eby) surveyed the aquatic plants in **Sweetwater Cove Lakes.**

Lyngbya, an invasive blue-green algae, is known for its rapid growth and its tendency to resist herbicides. All of the Sweetwater Cove Lakes currently have Lyngbya in varying amounts. The Lower cove has the greatest percent coverage of lyngbya.

On May 21st all herbicide treatments were halted due in response to low dissolved oxygen (DO) levels and a fish kill on the Lower cove. Since then, routine water quality measuring has been conducted to monitor the chemistry of the cove. Now that the dissolved oxygen levels have stabilized, algaecide and routine shoreline treatments will begin again on a 14 day period. In addition to the Lyngbya, a rust-colored algae (*Botryococcus sp.*) has formed on the west side of the Lower cove.

Photo: Lyngbya (invasive algae) with rust colored algae bloom (*Botryococcus sp.*).

There were no species of native submersed aquatic vegetation (SAV) observed during the inspection.

Photo: Middle Cove

Native emergent vegetation found during the survey included: canna, saw-grass, flat sedge, slender spikerush, soft rush, duckweed, pickerelweed, duck potato, blueflag iris, arrow arum, and fireflag. Most of the SERV planting sites are in great health and expanding.

Photo: SERV planting site showing fire flag (native) and duck potato (native).

Invasive emergent vegetation included: alligatorweed, torpedo grass, and elephant ear.

Photo: Lower cove inflow.

Photo: Lower cove outflow

Recommendations for your waterbody:

1 Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as county or state biologists), and discuss lake specific issues, especially nutrients/lake management recommendations. SCLMP staff will be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shorelines (such as pickerelweed, duck potato, and canna).

2 Consider increasing street sweeping services during times of peak leaf fall to ensure that this debris does not enter waterways. Leaf debris contains high levels of phosphorous that can negatively impact your lakes.

3 Increase educational outreach programs, i.e. Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal pollution by: decreasing fertilizer usage, using only phosphorous free and slow release nitrogen types of fertilizers, keeping a functional shoreline with beneficial native aquatic plants, and by keeping grass clippings out of your lake and the stormdrains that lead to the lake. All of these activities aid in protecting your lake! Contact Seminole County Lake Management Program (407) 665-2439 for more information regarding the free educational programs available.

4 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list so that these reports can be shared with everyone. Valuable information is contained within these assessments.

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Seminole Education, Restoration & Volunteer (SERV) Program
Follow prior & upcoming events now on facebook!!

SEMINOLE COUNTY WATERSHED MANAGEMENT DIVISION

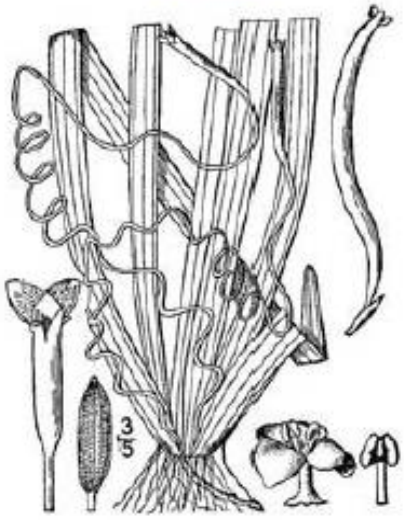
Aquatic Plant of the Month

Eelgrass (*Vallisneria americana*): A Florida Native

Eelgrass, also known as tapegrass, is native to the state of Florida.

Identification

Eelgrass is a submersed, perennial plant that can be found throughout the state in both still and flowing waters. Eelgrass leaves often resemble tape or ribbon. They are about an inch wide with raised veins and rounded tips. The leaves can grow several feet in length and their upper parts can often be found floating along the water surface. Eelgrass produces both male and female flowers, however, the small, white female flowers are most often seen, as their long, corkscrew-like flower stalks reach the surface of the water.

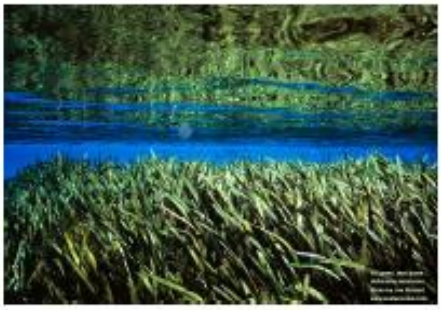


Wildlife Value

Eelgrass is an important food source for the endangered West Indian manatee (*Trichechus manatus*) and various species of waterfowl. Additionally, eelgrass provides important habitat, protection, and nursery grounds for fish.

Native submersed aquatic plants provide habitat for several micro- and macroinvertebrate species, which in turn provide a source of food for fish and other aquatic wildlife species including reptiles, amphibians, and waterfowl. Once aquatic plants die, their decomposing parts provide food (referred to as "detritus") for several aquatic invertebrates.

Additionally, native submersed plants play an important role in the aquatic ecosystem by reducing nutrients within the waterbody and by competing with invasive species for space.



Control

Although native, eelgrass may impede recreational access. For questions concerning control of eelgrass or to apply for a free aquatic plant removal permit, please contact your state agency, the Florida Fish and Wildlife Conservation Commission, online at: http://myfwc.com/license/aquatic-plants or by calling 407-858-6170.

SEMINOLE COUNTY
FLORIDA'S NATURAL CHOICE

Sources:

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